

Prevalence and Co-Existence of Diabetes with HIV and HCV Infection in Kermanshah-Iran

A. Janbakhsh*, F. Mansouri, S. Vaziri, B. Sayyad, M. Afsharian, S.S. Meigouni

Kermanshah university of medical science, kermanshah, Iran (Islamic Republic of)

Background: Diabetes Mellitus (DM) comprises a group of common metabolic disorders that share the phenotype of hyperglycemia. Increasing age, family history, race, obesity, hypertension, and history of vascular disease are known predisposing factors for diabetes. It seems that chronic hepatitis C and HIV/HCV co-infection and antiretroviral treatment (ART) especially regimen contains protease inhibitors may predispose to diabetes. Regard to more prevalence of diabetes in HCV infected patients in other studies and also increasing number of HIV infected cases and HIV infected patients treating with antiretroviral drugs in the country and importance of early diagnosis and control of chronic disease in these patients, this study was conducted to determine prevalence of diabetes in patients with HIV and HCV infection.

Methods: In this descriptive cross-sectional study, the registries of 150 HCV patients and 50 HIV patients and 90 HIV/HCV co-infected patients in hepatic clinics and consulting center for behavioral disorders of Kermanshah University of Medical Science in 2007 which selected by convenience sampling, were studied. Data of age, sex, duration of disease, history of injection drug user (IDU), liver enzymes level, CD4 count, ART, treatment with interferon (IFN), and blood sugar level were collected. If they had two fast blood sugar (FBS) ≥ 126 or random blood sugar (BS) ≥ 200 were described diabetic. The data analyzed by SPSS software with chi-square, Fisher and Z tests

Results: The prevalence of diabetes was 2.7% among patients infected with HCV, and 4% in patients infected with HIV and 2.2% in patients co-infected with HIV/HCV. None of the variables including age, sex, liver enzyme, injecting drug usage, CD4 count, antiretroviral treatment, and interferon were determined as risk factors for diabetes.

Conclusion: Although we didn't find any significant correlation between HIV and HCV infection and HIV/HCV co-infection with increasing risk of diabetes, but according to previous studies and incomplete information about some diabetes risk factors in our registries such as BMI, staging of cirrhosis, HCV viral load and nutritional status of HIV infected cases and exclusion of subjects with only one abnormal FBS from our samples, we recommended regular measurement of FBS for HIV, HCV infected and HIV/HCV co-infected patients and designing supplement studies considering these risk factors. Key Words: HIV, HCV, Diabetes, Kermanshah

doi:10.1016/j.ijid.2008.05.1346

Unusual Cutaneous Infections in HIV

B. Mehta*, M. Dhingra, S. Amladi, C. Nayak, S. Savant

B.Y.L. Nair Charitable Hospital and T.N.Medical College, Mumbai, India

We discuss four unusual cutaneous infections in HIV positive patients.

Case 1: A 45 year old female presented with complaints of multiple ulcers with foul smelling discharge in perigenital region since 1 month. There was history of recurrent fever, diarrhoea and weight loss since 1 year, past herpes zoster and abdominal tuberculosis. On examination there were multiple round to oval, deep ulcers with undermined edge and thick yellowish slough in the perigenital region and on the buttocks. CD4 counts was 173. Pus swab grew *Staphylococcus aureus*. Edge biopsy from the ulcer showed presence of gram positive cocci in clusters; PAS stain showed Michaelis-Gutmann inclusion bodies confirming the rare presentation of cutaneous MALAKOPLAKIA due to *Staphylococcus aureus*. She was treated with intravenous antibiotics with complete healing of ulcers.

Case 2: A 30 year old male presented with multiple red raised painful lesions on face, trunk and extremities associated with pain 1 month after starting 3 drug ART (d4T + 3TC+NVP). Sensory loss, multiple nerve thickening, edema of the feet and knee joints, along with biopsy findings, indicated Type I reaction in Tuberculoid leprosy. CD4 count at start of ART was 162, and increased to 264, indicating Immune Reconstitution Inflammatory response (IRIS). This was a rare presentation of reaction in leprosy as a manifestation of IRIS. The patient responded well to multidrug therapy.

Case 3: A 33 year old male acutely developed multiple large pus filled ulcerated lesions since 15-20 days without pain and constitutional symptoms. He had multiple large carbuncle-like ulcers on nape of neck, chest and upper extremities, which grew *S.aureus*. CD4 count was 127. The unusual presentation led to detection of HIV in this patient. Patient responded to iv antibiotics.

Case 4: A 60 year old male presented with 10 days history of multiple, painful, oozing lesions over both hands and feet associated with swelling of hands and feet. He had tender, tense haemorrhagic bullae and multiple erosions with central eschar distributed over dorsae of hands, extensors of forearms and elbows, dorsal aspect of right foot and lateral aspect of right leg. CD4 count of 18. Pus swabs grew *E.coli*. A final diagnosis of *Echthyma gangrenosum* was reached. Despite appropriate therapy, he succumbed to death due to septicemia.

doi:10.1016/j.ijid.2008.05.1347